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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/821,666

04/09/2004

John McNally

18133-225CON

8769

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7590

12/14/2005

MINTZ, LEVIN, COHN, FERRIS, GLOVSKY
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EXAMINER

SQUIRES, BRETT S

ART UNIT

PAPER NUMBER

2836

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.	Applicant(s)	
	10/821,666	MCNALLY ET AL.	
	Examiner	Art Unit	
	Brett S. Squires	2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 45-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 45 recites the limitation "initializing the power strip according to at least one system parameter or at least one operating configuration" in page 5 lines 8-9 of the preliminary amendment filed on November 18, 2004. There is insufficient antecedent basis for this limitation in the claim because "a power distribution system" was previously defined and not "the power strip."

Claim 46 recites the limitations "programming delays into the power distribution system, the delays being related to powering-on and powering-off the second group of power outlets" and "programming the sequence for which the second group of power outlets is powered-on and powered-off" in page 5 lines 19-22 of the preliminary amendment filed on November 18, 2004. There is insufficient antecedent basis for these limitations in the claim because "the second group of power outlets" was not previously defined.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 45 is rejected under 35 U.S.C. 102(b) as being anticipated by Schreiber (US 5,424,903).

Schreiber discloses an intelligent power switching system for controlling the electrical connection of a power source to each of a plurality of outputs that energizes an input power line to power-up a group of power outlets on a power distribution system (The input power line is energized when the AC plug figure ref# 26 is plugged into the wall outlet.), initializing the power strip according to at least one system parameter or at least one operating configuration (The power strip is initialized according to the position of the power switch figure 2 ref# 26f, col. 3 lines 56-68, and col. 4 lines 1-3), and controlling a relay to actuate to a conductive state in accordance with a predetermined sequence and a predetermined delay to sequentially power-on at least one of the power outlets in the group of power outlets on the power distribution system (col. 2 lines 18-68, col. 3 lines 1-15, 56-68, and col. 4 lines 1-17).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 33-35 are rejected under 35 U.S.C. 103(a) as being obvious over Schreiber (US 5,424,903) and Kim (US 5,825,100).

Schreiber discloses an intelligent power switching system for controlling the electrical connection of a power source to each of a plurality of outputs having a housing with a first end and a second end ("Power Strip" figure 1 ref# 16), at least one power outlet mounted on an exterior surface of the housing ("Outlets" figure 1 ref# 32a-32f), a power management circuit defined on an interior region of the housing including a micro-controller ("Micro-Processor" figure 2 ref# 40) coupled to the power supply ("Power Supply" figure 2 ref# 36 and col. 5 lines 5-22) and to a relay driver ("Master Relay" figure 2 ref# 42 and "Relay Switch" figure 2 ref# 46a-46e), the relay driver receiving control signals from the micro-controller (col. 4 lines 18-64), at least one relay is coupled to the relay driver ("Master Relay" figure 2 ref# 42) and to the at least one power outlet wherein the relay receives a control signal from the relay driver to actuate the relay to a conductive state to powering-on the power outlet and the relay receives another control signal from the relay driver to actuate the relay to a non-conductive state to powering-off the power outlet (col. 2 lines 18-68, col. 3 lines 1-15, and col. 4 lines 18-64), and an under voltage sensor coupled to the micro-controller and adapted to receive a predetermined voltage value from the power supply ("Power Monitor" figure 2 ref# 38 and col. 4 lines 54-64 [The examiner respectfully points out that no power flowing from

the 110VAC power supply to the power strip is an undervoltage condition because no voltage will be flowing into the power strip, thus a the power monitor will sense 0 volts.]).

Schreiber does not disclose an input power source sensor circuit is coupled intermediate the power supply and the micro-controller to receive input power from the power supply and secondary input power from a secondary power source whereby the input power source sensor circuit provides the primary input power to the micro-controller and if the primary input power fails the input power source sensor circuit provides the secondary input power to the micro-controller.

Kim discloses an intelligent battery power system having an input power source sensor circuit ("Power Controller" figure 6 ref# 103b) is coupled intermediate the power supply ("Main Battery" figure 6 ref# 301) and the micro-controller ("Main System" figure 6 ref# 106) to receive input power from the power supply ("Main Battery" figure 6 ref# 301) and secondary input power from a secondary power source ("Swap Battery" figure 6 ref# 304) whereby the input power source sensor circuit provides the primary input power to the micro-controller and if the primary input power fails the input power source sensor circuit provides the secondary input power to the micro-controller (figure 7, col. 5 lines 21-67, and col. 6 lines 1-2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Schreiber to include an input power source sensor circuit that can supply power from a primary power source and a secondary power source such as that taught by Kim in order to provide prolonged backup power for the

micro-controller to prevent the relays operating in an uncontrolled manner when the main power is removed for any reason (Kim col. 1 lines 43-50).

Regarding Claim 34:

Schreiber discloses a first group of power outlets being coupled to the sensor ("Outlet" figure 2 ref# 32d-32e and "Power Monitor" figure 2 ref# 38) and a second group of power outlets being coupled to the sensor circuit via the at least one relay ("Outlet" figure 2 ref# 32a-32b and "Master Relay" figure 2 ref# 42).

Regarding Claim 35:

Schreiber discloses the power strip includes a plurality of communications port ("RJ-11 Connector" figure 2 ref# 48). [A plurality is interrupted to mean one or more.]

7. Claims 36-37 are rejected under 35 U.S.C. 103(a) as being obvious over Schreiber (US 5,424,903) and Kim (US 5,825,100) and Farrant (US 6,211,581).

The above stated combination of Schreiber and Kim discloses a power strip having a plurality of communications ports but does not disclose the communication ports include a first communication port coupled to a communication-in circuit and a second communication port coupled to a communication-out circuit, the communication-in circuit and the communication out circuit being further coupled to the micro-controller and the communication-in circuit includes the secondary power source.

Farrant discloses a power bar with remote control having a first communication port coupled to a communication-in circuit ("USB Port" figures 21-22,26-27 ref# 60 and col. 7 lines 15-51) and a second communication port coupled to a communication-out circuit ("USB Port" figures 21-22,26-27 ref# 60 and col. 7 lines 15-51), the communication-in circuit and the communication out circuit being further coupled to the micro-controller (It is inherent that the USB hub has a processor or controller for routing the data being sent through the USB ports.) and the communication-in circuit includes the secondary power source (For a port to be in compliance with the USB standards the transmission of 5 volts is required and the 5 volts required by the USB connection is being read on the secondary power source.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the above stated combination of Schreiber and Kim to include a USB hub such as that taught by Farrant in order to allow the power strip to be remotely controlled by a computer (Farrant col. 1 lines 54-57).

8. Claims 44 is rejected under 35 U.S.C. 103(a) as being obvious over Schreiber (US 5,424,903) and Kim (US 5,825,100) and Kahle (US 5,270,576).

The above stated combination of Schreiber and Kim discloses a power strip having an under voltage sensor coupled to the micro-controller and adapted to receive a predetermined voltage value from the power supply (Schreiber "Power Monitor" figure 2 ref# 38 and col. 4 lines 54-64), but does not disclose current sensor circuit that is

adapted to receive input power over an input power line and the current sensor circuit being coupled to a power supply and to the at least one power outlet.

Kahle discloses an electrical connector network having a current sensor circuit ("Current Sensor" figure 1 ref# 18) that is adapted to receive input power over an input power line and the current sensor circuit being coupled to a power supply and to the at least one power outlet ("Control Outlet" figure 1 ref# 12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the above stated combination of Scheiber and Kim to include a current sensor circuit that is adapted to receive input power over an input power line and the current sensor circuit being coupled to a power supply and to the at least one power outlet such as that disclosed by Kahle in order to allow the user to more conveniently turn on and off electrical appliances by allowing the user to use the switch on the appliance rather than a remote switch (Kahle col. 1 lines 38-50).

9. Claims 55 is rejected under 35 U.S.C. 103(a) as being obvious over Chapel (US 6,628,009) and Schreiber (US 5,424,903).

Chapel discloses an equipment rack having a plurality of power strips mounted in the equipment rack ("Power Strip" figure 1 ref# 30A-30D), the equipment rack having a number of slots adapted to securely hold a number of pieces of equipment ("Equipment Bays" figure 1 ref# 101-110, 201-210, and col. 2 lines 51-67), each power strip having a first and second end ("Power Strip" figure 1 ref# 30A-30D), and at least one power

outlet mounted on an exterior surface of the housing ("Power Strip" figure 1 ref# 30A-30D).

Chapel does not disclose a power management circuit defined on an interior region of the housing including a micro-controller coupled to the power supply and to a relay driver, the relay driver receiving control signals from the micro-controller, at least one relay is coupled to the relay driver and to the at least one power outlet wherein the relay receives a control signal from the relay driver to actuate the relay to a conductive state to powering-on the power outlet and the relay receives another control signal from the relay driver to actuate the relay to a non-conductive state to powering-off the power outlet.

Schreiber discloses power strip having a power management circuit defined on an interior region of the housing including a micro-controller ("Micro-Processor" figure 2 ref# 40) coupled to the power supply ("Power Supply" figure 2 ref# 36 and col. 5 lines 5-22) and to a relay driver ("Master Relay" figure 2 ref# 42 and "Relay Switch" figure 2 ref# 46a-46e), the relay driver receiving control signals from the micro-controller (col. 4 lines 18-64), at least one relay is coupled to the relay driver ("Master Relay" figure 2 ref# 42) and to the at least one power outlet wherein the relay receives a control signal from the relay driver to actuate the relay to a conductive state to powering-on the power outlet and the relay receives another control signal from the relay driver to actuate the relay to a non-conductive state to powering-off the power outlet (col. 2 lines 18-68, col. 3 lines 1-15, and col. 4 lines 18-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Chapel to include a power strip such as that disclosed by Schreiber in order to allow the equipment in the equipment rack to be sequentially turned off and on in time-delayed intervals defined by the user (Schreiber col. 2 lines 1-17).

10. Claims 56 is rejected under 35 U.S.C. 103(a) as being obvious over Chapel (US 6,628,009) and Schreiber (US 5,424,903) and LeMaster (US 5,149,277).

The above stated combination of Chapel and Schreiber discloses an equipment rack having a plurality of power strips mounted in the equipment rack (Chapel "Power Strip" figure 1 ref# 30A-30D), but does not disclose the power strip are daisy chained together to form a scalable power strip.

LeMaster discloses connectivity management system having a main breakout box (figure 7 ref# 15) and two satellite breakout boxes daisy chained to the main breakout box (figure 7 ref# 76a-76b and col. 9 lines 27-46).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the above stated combination of Chapel and Schreiber to include daisy chaining the power strips together such as that taught by LeMaster in order to reduce the number of micro-controllers need to control the power strips.

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11. Claims 57 is rejected under 35 U.S.C. 103(a) as being obvious over Chapel (US 6,628,009) and Schreiber (US 5,424,903) and Kahle (US 5,270,576).

The above stated combination of Chapel and Schreiber discloses an equipment rack having a plurality of power strips mounted in the equipment rack (Chapel "Power Strip" figure 1 ref# 30A-30D), but does not disclose current sensor circuit that is adapted to receive input power over an input power line and the current sensor circuit being coupled to a power supply and to the at least one power outlet.

Kahle discloses an electrical connector network having a current sensor circuit ("Current Sensor" figure 1 ref# 18) that is adapted to receive input power over an input power line and the current sensor circuit being coupled to a power supply and to the at least one power outlet ("Control Outlet" figure 1 ref# 12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the above stated combination of Scheiber and Schreiber to include a current sensor circuit that is adapted to receive input power over an input power line and the current sensor circuit being coupled to a power supply and to the at least one power outlet such as that disclosed by Kahle in order to allow the user to more conveniently turn on and off electrical appliances by allowing the user to user the switch on the appliance rather than a remote switch (Kahle col. 1 lines 38-50).

Double Patenting

12. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

13. Claim 46/45 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 11/10 of prior U.S. Patent No. 6,741,442. This is a double patenting rejection. The examiner notes that the applicant accidentally uses of the term "the power strip" instead of "the power distribution system" in claim 45 and upon correction of this mistake the above stated double patenting rejection will apply. Additionally the examiner would like to point out that a plurality is interrupted to mean one or more.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure. Additional prior art of interest includes but is not limited to the following US Patents and Publications, Foreign Patents and Publications and Non-patent Literature: Nguyen (US 5,506,790)


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brett S. Squires whose telephone number is (571)272-2268. The examiner can normally be reached on 9am-5:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)272-2800 x 36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brett S Squires
Examiner
Art Unit 2836



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